For investment professionals

Legal & General INVESTMENT MANAGEMENT

CIO outlook: Opportunities in adversity

Foreword:

Navigating choppy waters

When contemplating what the final months of 2019 might have in store, we are probably similar to many other investors in feeling somewhat apprehensive, given the challenges we face: trade tensions, slowing growth, policy uncertainty and, of course, Brexit.

Looking further ahead, other issues come into focus that could also provoke concerns, namely the dramatic technological, environmental and demographic shifts already underway. But while we see both these near- and longer-term challenges as important risks to be considered, we also view them as opportunities to be grasped on behalf of our clients.

In this outlook, we bring together teams from across LGIM to answer key questions for our clients regarding the market and macro outlook over these different time horizons. Some of our conclusions, such as the following, may be surprising:

- Negative yielding bonds are likely to become vital tools for investors
- Equity strategies may prove particularly potent even as growth cools
- Over $100 billion of IG bonds face downgrades – regardless of the economic backdrop
- Reports of the death of inflation may be greatly exaggerated
- Trade hostilities and economic revival can be hedged simultaneously
- Pension schemes should consider using non-traditional measures of risk

These views stem in part from our cross-asset, thematic research, which aims to understand the sources and power of long-term, structural change and disruption.

Our ultimate goal is to identify growth themes and risk scenarios for the next five-to-ten years. For example, technology is one of our long-term themes, within which we have identified robotics and cyber security as particularly appealing investment propositions.

At the same time, we constantly examine the macroeconomic and market environment in order to establish more immediate investment views. The benefit of combining both types of analysis is that we enhance our understanding of investment opportunities and risks, across different asset classes and multiple time horizons.

Over the following pages, we demonstrate this approach with a discussion of our macro base-case view and associated tail risks; negative rates and asset allocation; and the principles of portfolio construction.

This outlook does not shy away from the fact that there is plenty to fret about in the coming months and years, presenting investors with decidedly choppy waters to navigate. But we also show that there is a huge amount to be excited about, if we give serious consideration to the threats and make the most of the opportunities.

In doing so, through investing the capital that our clients have entrusted to us, we can also have a positive impact on the economy, the environment and society at large.

Sonja Laud
Chief Investment Officer

Economics:

Growth cools as risks mount

Global growth has cooled over the last year. Looking ahead, the question is whether the world economy has the underlying strength to prevent a number of key risks – from trade tensions, to a manufacturing slowdown, to Brexit – from tipping it towards recession.

While each round of tariffs in the US-China trade war appears manageable, the negative impact is starting to accumulate. If a fragile truce at the current tariff levels were to persist, we would expect global growth of around 2.5% in 2020. This is close to its underlying potential and the average pace of recent decades.

Risks are firmly to the downside, however. We worry that the threat of further escalation could damage already-fragile business confidence and see a one-in-three chance of a global recession (defined as growth dropping to below 2%).

But it is not all bad news. Low inflation means central banks are willing to offset some of the trade shock, while the recession indicators we track generally do not signal the types of imbalances, financial stress or overheating which typically presage downturns, though there are signs of increasing vulnerability in the US corporate sector.

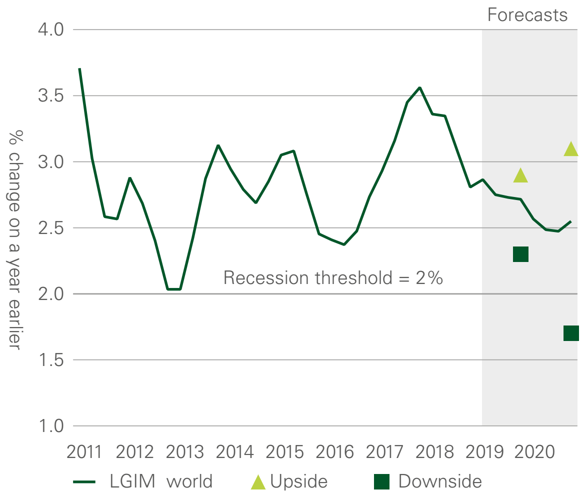
There is also the possibility that a trade deal is ultimately reached; after all, US President Donald Trump recognises he needs a strong economy to get re-elected next year.

For now, global manufacturing output has stagnated as the trade war has disrupted supply chains and increased uncertainty. This shock to global business confidence has undermined capital expenditure and led to a build-up in inventories, which is yet to show signs of turning around.

In the meantime, the global consumer has been relatively well insulated: many economies are at, or close to, full employment and low inflation is also helping to boost real income growth. Households feel confident and, unlike during the last cycle, they have a decent savings buffer.

There is a risk the weakness in manufacturing begins to affect employment and ultimately services, but low inflation has enabled policymakers to be quick to signal support to cushion the trade shock. This has helped stabilise financial conditions.

World GDP forecasts



Source: LGIM, Macrobond

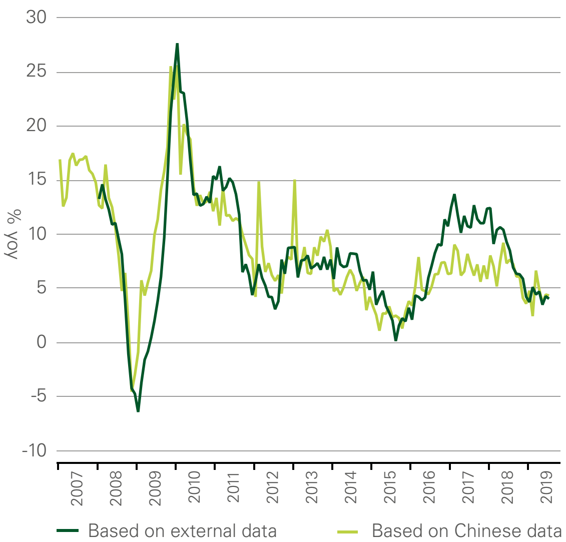
2.5% Global growth in 2020 if trade truce around current tariff levels persists

Chinese FX

The trade war struck China just as the world's second largest economy was cracking down on its shadow banking system, leading to a sharper-than-expected slowdown.

Chinese officials have signalled they are not intending to weaponise their currency to boost growth, though we expect market forces to lead to further modest depreciation now the renminbi has weakened through 7 versus the US dollar. Our growth trackers tentatively suggest some stabilisation, but more stimulus might be required to prevent Chinese GDP sliding further.

China: Growth trackers



Source: LGIM, Macrobond

Argentina, meanwhile, appears headed for a debt-restructuring, but for most other emerging markets, the external environment would be generally favourable without the trade tensions. Falling interest rates in developed markets reduce exchange rate pressure and many countries have already embarked on some monetary policy easing.

Beyond the trade war and numerous geopolitical challenges, several other macro risks remain:

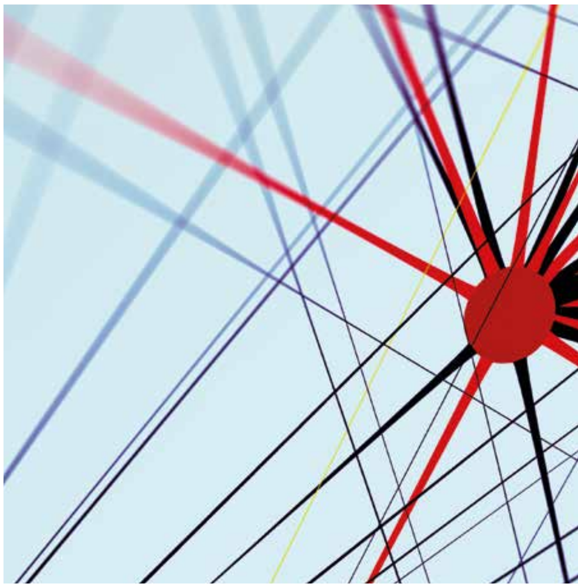
- In Europe, the prospect of fresh quantitative easing (QE) has reduced concerns over Italy's fiscal position, but these could return if central bank liquidity is ever withdrawn
- The UK's new cabinet appears on a collision course with the EU and parliament, likely leading to a highly uncertain general election. A 'no deal' Brexit could easily trigger a euro area recession
- Japan's consumption tax increase, scheduled for October, is badly timed

We also worry that global debt levels are still relatively high and could be exposed, should inflation and interest rates suddenly rise.

Tim Drayson
Head of Economics

Fixed income focus:

Negative yields and the illusion of money



What was once a puddle of negative-yielding fixed income securities has now become an ocean, containing trillions of dollars of bonds. This phenomenon poses numerous challenges to investors – not least cognitive.

Indeed, the minus sign is often hard for the human mind to digest due to the theory of 'money illusion', which suggests people reflexively judge outcomes in nominal rather than real terms. This means we might still feel good if our salaries go up by 10% and consumer prices rise by the same amount, even though we will have gained nothing in real terms.

So the 'sticker shock' of negative yields should be easier to process if viewed alongside real yields, which have themselves been negative in a number of markets for some years now and sporadically so over the long sweep of financial history.

Crucially, regardless of yield levels, we think investors should consider fixed income assets in the context of their liabilities, and the outcomes they seek to achieve. So even if they are looking for a positive nominal return in their overall portfolio, such bonds can still perform a sensible part of an overall asset allocation.

Bubble risk

Could the collapse in global yields be due to a vast speculative frenzy? Despite the optical oddity of negative rates, we do not believe bonds are in the midst of a bubble in which the market completely decouples from fundamentals.

We base this view on the current level of real yields and central bank accommodation, as well as expectations for monetary stimulus. We also see little of the investor exuberance commonly associated with the latter stages of bubbles, other than persistently high bond flows in the U.S. from retail investors.

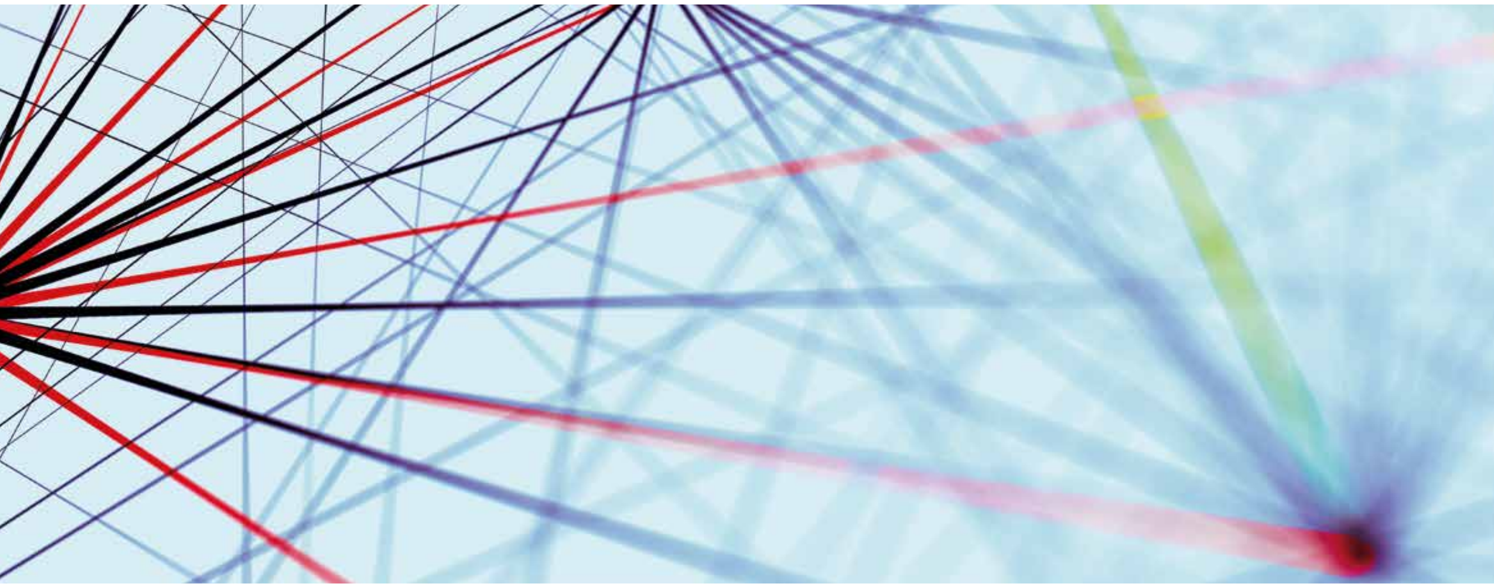
While we are observing broad shifts in behaviour as people look for positive returns by taking on more risk, many investors are risk-constrained – so the changes remain marginal.

This means the current momentum in yields can continue, further boosting the performance of bond markets. Moreover, government debt in Europe and Japan can still deliver more than cash due to relatively steep curves, offering returns from 'roll-down' strategies. And US dollar- and sterling-based investors looking at these markets may also wish to consider potential returns after the uplift provided by hedging back into their domestic currency.

$16.8 trillion

Global value of negative-yielding debt*

*Source: Bloomberg, as at 31 August 2019



How low can yields go?

It would be tempting to call a yield trough, especially in the US Treasury market, given that investors have already priced in a lot of bad economic news and action from the Fed.

But because we face significant events over the coming months and years with binary outcomes, including the ongoing trade hostilities and the US presidential election next year, the potential range for yield moves remains particularly large.

If and when yields do turn higher, we do not anticipate a broad-based selloff, so long as inflation remains low and monetary policy retains its current trajectory.

In our view, meaningfully higher inflation is a pre-condition for a damaging reversal in global bond markets, as this would scupper plans for further monetary easing. That pre-condition is not currently being met, as consensus expectations for higher inflation have been repeatedly confounded over the past five years.

> "Meaningfully higher inflation is a pre-condition for a damaging reversal in global bond markets"

Liquidity events

We study all these factors when making fixed income investments on behalf of our clients.

As such, we are wary of assets that could be exposed as the weakest links within global fixed income in the event that central banks shift their policy stance or reaction function, triggering liquidity events. These include somewhat exotic parts of the market that have proven very popular as rates have declined; for example, areas where underwriting standards have weakened, like ‘covenant-lite’ leveraged loans.

But broadly speaking, we believe that when faced with the deluge of negative-yielding securities, investors should say: these are still just bond investments, requiring thoughtful assessment and risk-management, albeit ones with minus signs.

Sonja Laud
Chief Investment Officer

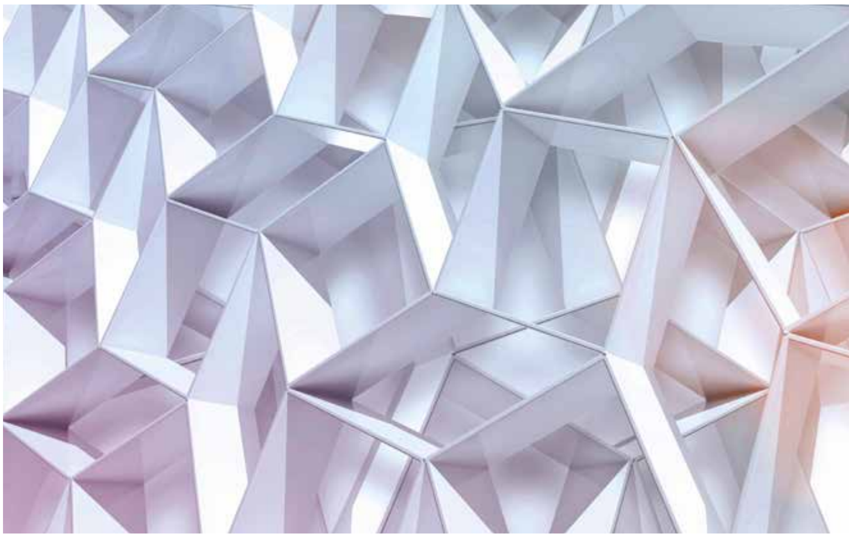
Christopher Jeffery
Strategist

Alex Mack
Fund Manager

Justin Tabellione
Senior Portfolio Manager

Tail risk #1:

Is inflation dormant or dead?

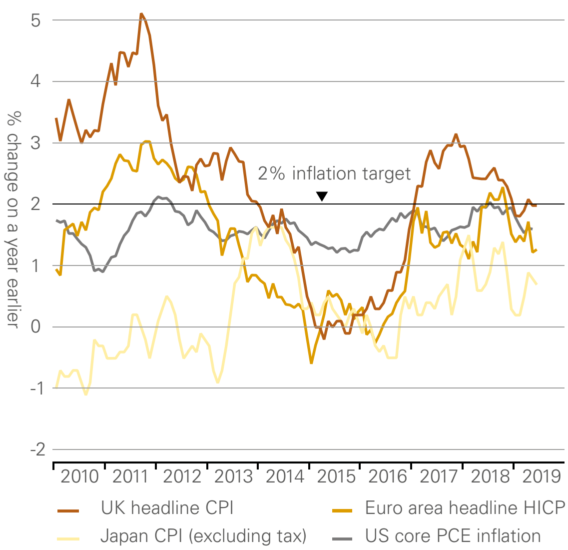


The historically low level of global bond yields suggests markets see very little inflation risk on multiple time horizons.

In recent years, many central banks – with the exception of the Bank of England, which has been aided by currency weakness – have struggled to meet their inflation targets. Even with policymakers showing an increased willingness to ease further, inflation expectations – both market-based and survey measures – indicate a lack of confidence that these targets will be hit in the future.

There are plenty of explanations. These range from globalisation, to the debt overhang, the role of technology, ageing populations, lower neutral rates and flatter Phillips curves.

Major developed market inflation



Source: Macrobond

But what might lead to a resurgence in inflation? One possibility is a period of above-potential growth. The financial crisis was so severe that it created a large amount of economic slack. It is possible that growth has not been strong enough over the past decade to eliminate the spare capacity currently subduing inflation.

Perhaps policymakers will add excessive stimulus in response to the recent softening in global growth and then some of the global uncertainties, especially around trade, will be resolved.

An unleashing of pent-up demand, at a time when many economies are already close to full employment, might finally drive up wages and inflation. This could lead to a rapid reassessment of interest rates, triggering the market ructions mentioned earlier in this publication.

A second possibility is that growth disappoints, despite exceptionally low interest rates, and concerns increase that monetary policy is close to exhaustion. This could eventually lead to a much more aggressive role for fiscal policy, as proponents of 'modern monetary theory' propose. If coordinated with central banks that are willing to resume quantitative easing or even conduct outright monetisation of the debt, this would surely raise inflation, but perhaps uncontrollably so.

Tim Drayson
Head of Economics

Tail risk #2:

Could rating downgrades mean trouble in paradise?

Corporate bonds have benefited from the extraordinary monetary policies outlined elsewhere in this outlook. But as the probability of global recession rises, we worry that vulnerabilities within credit markets could disturb this relatively blissful environment for investors.

Our bottom-up analysis of the global investment grade market reveals $460 billion of bonds at risk of being downgraded to high yield if the economy turns to recession, thus becoming 'fallen angels'.

This is a very high number compared to previous downturns (more than double that seen in 2009), mainly because credit markets have grown significantly since the global financial crisis. The majority of this growth has come from the lower quality end of the credit spectrum, so there is a higher proportion of debt already on the cusp of high yield than 10 years ago.

However, somewhat counter-intuitively, our analysis suggests a 'best case scenario' for credit markets – in which the economy holds up and quantitative easing continues – also poses a major risk to credit quality.

Low borrowing costs have encouraged the growth of debt-funded M&A and companies have shown a willingness to take on higher leverage and sacrifice credit ratings. Crucially, bond markets – supported by QE and investors searching for yield, as noted in our section on negative rates – have not punished companies for this behaviour.

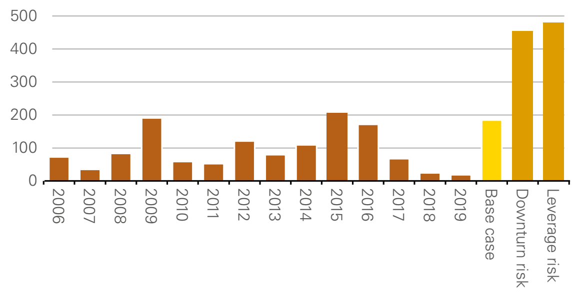
We have identified $360 billion of bonds that are already vulnerable. These have been issued by corporates whose leverage is elevated following M&A and for which debt reduction is required in order to preserve their investment grade ratings.

In addition, we estimate a further $120 billion could fall to high yield if buoyant market conditions encourage companies to sacrifice their credit ratings for a transformational transaction.

Whatever the market backdrop, we have to brace ourselves for the possibility that an unprecedented volume of bonds could fall into high yield over the coming years. In fact, we expect at least $100bn of downgrades regardless of economic conditions and corporate actions.

Fallen angels may not face "bottomless perdition", as the poet John Milton puts it, but a failure to absorb this debt would lead to a liquidity crisis for corporate borrowers. This would have significant repercussions for markets and the wider economy, while presenting opportunities to active investors.

Fallen Angel volumes ($ billion)



Source: BAML, Bloomberg, Rating agencies, LGIM.

Madeleine King
Co-Head of Pan European Investment Grade Research

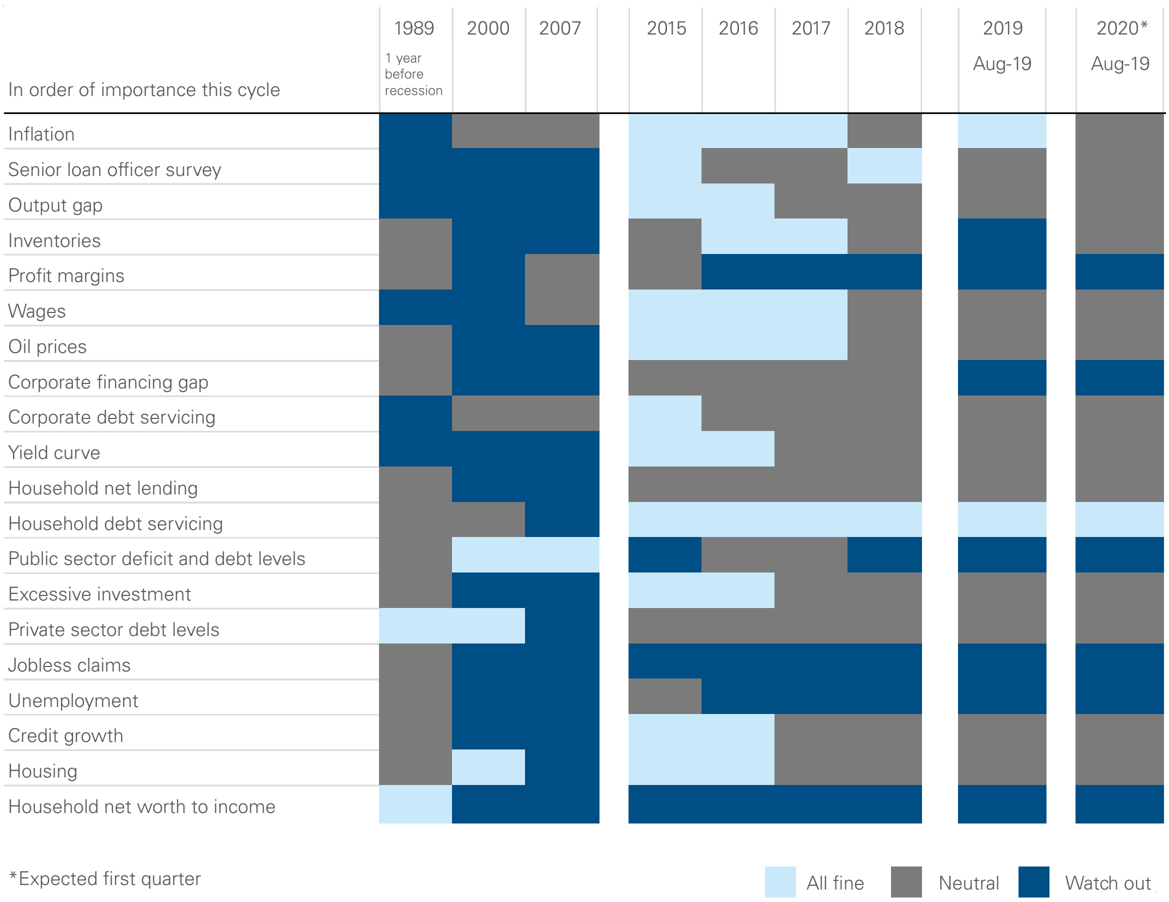
Asset allocation:

Preparing for the challenges ahead

The economic cycle is one of the most important drivers of long-term expected returns, with the risk-return profile of asset classes varying significantly according to where on the route between maximum expansion and contraction we locate the world economy.

So Tim's observation that risks to global growth are now skewed to the downside is not something asset allocators should take lightly. Indeed, the recession indicators we track, detailed below, suggest contraction is increasingly likely – though still not our base case.

US recession indicator heatmap



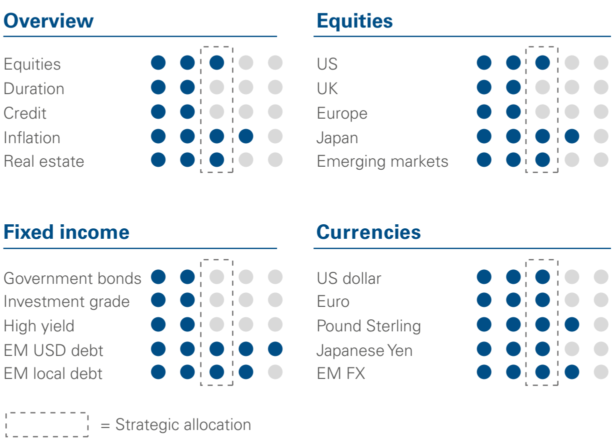
*Expected first quarter

Source: LGIM, Macrobond

Equity markets usually anticipate recessions six-to-nine months ahead of them actually taking place. We need, therefore, to get ahead of the curve, especially given the heightened risks from trade tensions.

As a result, we are taking profit on our medium-term stance on risk assets, which we are lowering to neutral from moderately positive. We now favour selling into strength rather than buying on dips.

Asset class views



This schematic summarises the combined medium-term and tactical views of LGIM's Asset Allocation team as of August 2019.

The midpoint of each row is consistent with a purely strategic allocation to the asset/currency in question. The strength of conviction in our medium-term and tactical views is reflected in the size of the deviation from that mid-point.

Readying for a darkening outlook

The shifting macro backdrop also presents us with some opportunities:

Underweight or short Eurozone equities versus global equities (ex-Eurozone, equally weighted)

- While European equities have held up well in the year to date, we are becoming increasingly bearish as we take a more cautious view of the economic outlook (Hetal Mehta, our European economist, sees a whopping 40% recession risk in Europe)
- Sentiment and valuations are not bearish enough to compensate for the risk, in our view

Underweight credit versus equities

- As investors react to plunging interest rates, term and credit risk premia are likely being distorted
- Our valuation framework suggests credit is indeed more expensive than equities; the equity risk premium now sits comfortably above its historical average
- We are concerned by the risks – highlighted by Madeleine – stemming from bond issuance spurred by loose monetary policy. Corporate bonds are also less liquid than stocks

Debt and demographics

Over the longer-term, we see other challenges for markets. The world still faces a growing debt burden and a demographic drag, for example, which have created a persistent disinflationary trend. This could even lead to outright deflation, wresting control of real rates from central bankers, triggering credit-market defaults and possibly leading to a Japanese-style slump.

These structural imbalances and risks have been brewing for at least a decade; how they will play out remains unclear. There is a chance, of course, that we could be positively surprised by technological developments lifting currently low productivity, a persistent source of hand-wringing in developed economies.

What is clear to us is that these structural vulnerabilities become much more pertinent when the global economy faces cyclical weakness, as it does at the moment.

"Alternatives can further diversify our portfolios and substantially add to returns"

The role of alternatives

We seek to reflect this low-inflation, low-yield world within our overall allocations. For example, we are overweight alternatives, or what we call 'mid-risk' assets, such as REITs, listed infrastructure and emerging market debt.

These assets can further diversify our portfolios and substantially add to returns. They have also performed well in recent spikes of risk aversion in the markets. Crucially, they help to mitigate the risk that bond yields remain low due to long-term trends as well as more technical reasons, such as regulation-driven demand and the fact that certain high-quality debt markets are set to shrink.

Finally, we favour exposure to US inflation, on the one hand because tariffs could raise consumer prices; and on the other, because rising inflation is the most common cause of a recession.

Even though this might currently seem a remote possibility, as inflation expectations have been falling, we believe it is worth buying some insurance against this path towards a recession. Doing so is also relatively inexpensive at the moment, in our view.

We cannot predict the outcome of geopolitical disputes or decades-long paradigm shifts; however, by taking such positions, we can certainly prepare for them.

Emiel van den Heiligenberg
Head of Asset Allocation

Solutions:

Sizing risks in portfolio construction

The belief that investment strategies should be designed with a client's objectives, constraints and time horizon in mind is at the heart of everything LGIM does.

Improving the range of possible outcomes should, in our view, not simply be focused on delivering performance relative to a certain benchmark. Investors will hold a range of both short- and long-term objectives, which could be wider than purely financial. So it is critical to understand the hurdles to an investor's ultimate success, not least economic and demographic challenges, the impact of costs, and risks such as the failure of a funding source.

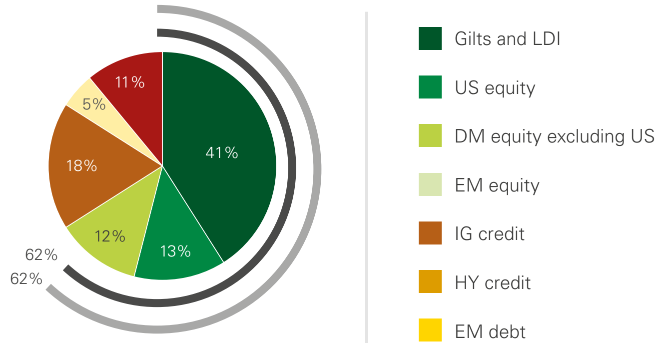
Because sources of return need to be sized appropriately in light of these factors, we devote significant resource to engaging with clients on the principles of portfolio construction, from establishing investment beliefs to diversifying rewarded risks and scenario-testing.

DB: model portfolios

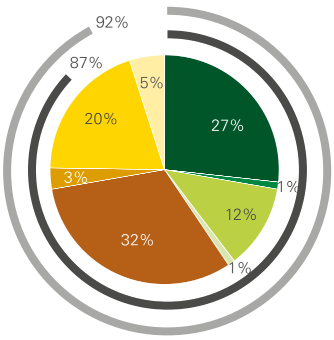
In this outlook, we focus on our work with UK defined benefit clients, showing below some illustrative strategies for a typical scheme.[1]

Our portfolios are driven by a focus on appropriate objectives and measures of success. We define success for pension schemes as the assets outlasting the liability cashflows and, in the event of failure, meeting as high a proportion of benefits as possible. This can represent a mind-set shift for trustees who are used to thinking of risk in terms of more traditional measures.

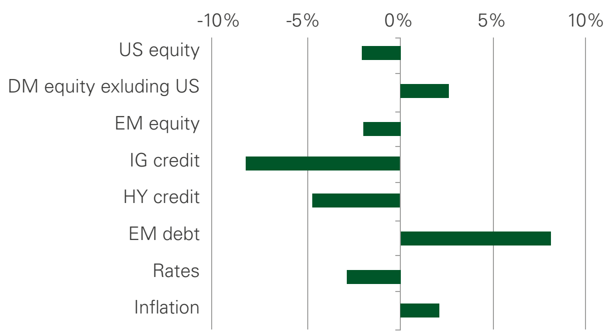
UK typical portfolio



Model portfolio



Tilts from strategic portfolio



Source: LGIM calculations; for illustrative purposes only.

Our graphs illustrate:

1. A fairly typical DB portfolio, very loosely based on the Purple Book[2] from the Pension Protection Fund.[3] For illustration, we assume rates and inflation hedge ratios of 62% of funded liabilities (i.e. assets) here.

2. Our model portfolio, which is built in two stages:

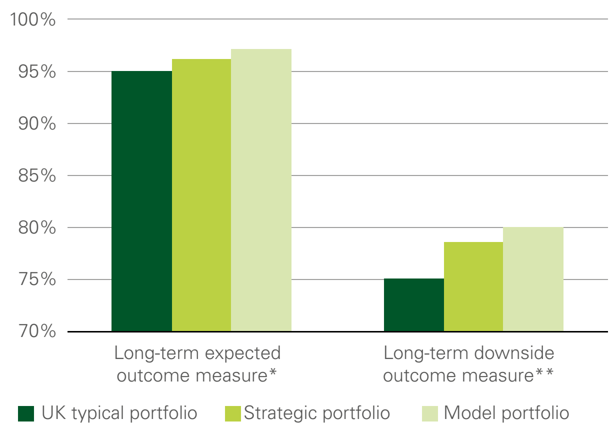
   (a) We start by building a strategic portfolio, based on our long-term return estimates and modelling of risk. This includes modelling covenant (sponsor)[4] risk; for this we have assumed a fairly typical initial sponsor rating of BB. Our approach involves testing how thousands of potential asset allocations perform in terms of the risk of ultimately failing to pay pensions.

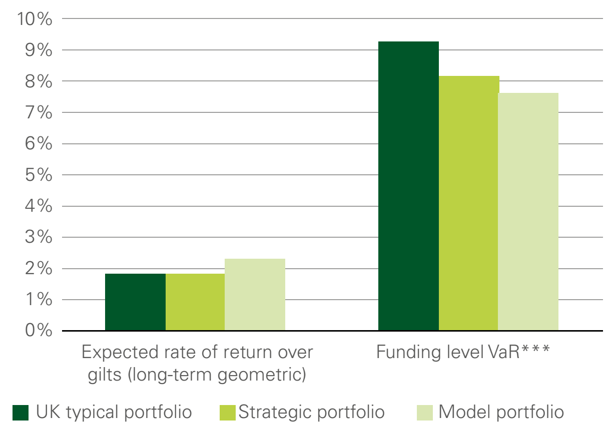
   (b) We then tilt the strategy; i.e. overweight asset classes that appear to offer higher risk-adjusted returns over the medium term and underweight those with worse apparent prospects. These tilts are based on the multi-asset views outlined by Emiel earlier; for example, a strongly positive view on emerging market USD debt. The bar chart shows how the model portfolio differs from our long-term allocation. In general, our tilts vary with scheme-specific circumstances. For example, schemes with more aggressive strategic allocations have larger tilts.

What's the impact?

Our process involves modelling the distribution of outcomes for members in terms of the proportion of pensions ultimately paid. We show below statistics based on this idea for long-term success, both on average and in a downside scenario. We also include some more traditional measures – namely the expected rate of return over gilts and funding level value-at-risk (VaR).

Modelling long-term success





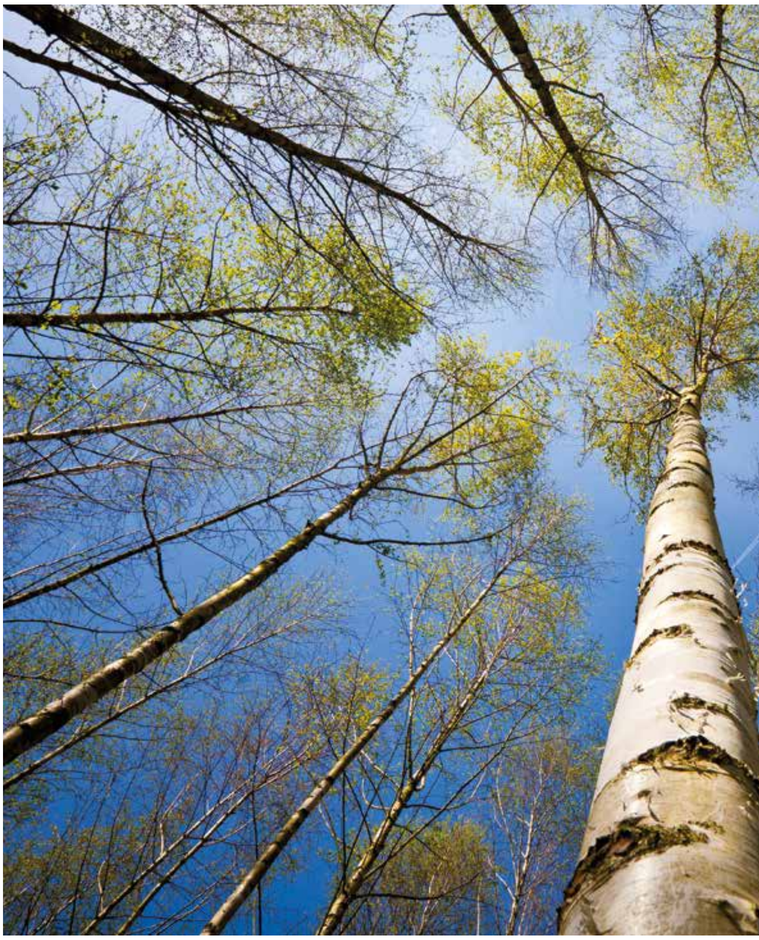
Source: LGIM calculations; for illustrative purposes only.

* Expected proportion of benefits met (EPBM)
** 1-in-20 proportion of benefits met (1 in 20 PBM)
*** One year, 1-in-20 downside funding level relative to the median on a gilts basis

Our analysis suggests increased diversification,[5] using leveraged liability-driven investment to reduce 'cash drag' and increase hedge ratios, and ensuring an appropriate target level of return (that takes into account covenant risk) can improve the distribution of outcomes.

By introducing dynamic tilts, we estimate that our long-term success measures could be further enhanced from relative-value trades to reflect our macro views.[6] This framework can be used to analyse many types of investment strategy and scheme circumstances.

John Southall
Head of Solutions Research



1. Buyout funding level 75%, 20 year duration
2. "https://www.ppf.co.uk/sites/default/files/file-2018-12/the_purple_book_web_dec_18_2.pdf"
3. Note this is based on the average of DB schemes so could overstate diversification.
4. "http://www.lgim.com/uk/en/insights/our-thinking/client-solutions/covenant-risk-modelling-managing-and-mitigating-a-key-risk.html"
5. Including at a more granular level than can be seen in the pie charts
6. The dynamic portfolio is expected to generate alpha of 0.5% pa relative to the strategic portfolio and on average (over time) is expected to have the same asset allocation as the strategic portfolio. To allow for active risk we allow for uncorrelated tracking error of 1% pa and, more significantly, allow for the parameter uncertainty in our mean alpha assumption. We assume ex-ante alpha that has a standard deviation of 0.5%; in particular we assume a c.16% chance that ex-ante alpha is negative.

Contact us

For further information about LGIM, please visit lgim.com or contact your usual LGIM sales representative.

@lgim

Podcast LGIM Talks

FUTURE WORLD bl·g

Important notice

The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.

This document is designed for the use of professional investors and their advisers. No responsibility can be accepted by Legal & General Investment Management Limited or contributors as a result of information contained in this publication.

Specific advice should be taken when dealing with specific situations. Past performance is not a guide to future performance. This document may not be used for the purposes of an offer or solicitation to anyone in any jurisdiction in which such offer or solicitation is not authorised or to any person to whom it is unlawful to make such offer or solicitation.

© 2019 Legal & General Investment Management Limited. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, without the written permission of the publishers. Legal & General Investment Management Ltd, One Coleman Street, London, EC2R 5AA Authorised and regulated by the Financial Conduct Authority.

M2018

Legal & General
INVESTMENT MANAGEMENT